201801AAF

Winnebago Reclamation Service, Inc.

Tule V 10

5450 Wansford Way, Suite 201 • Rockford, IL 61109 • Tel: (815) 963-7516 • Fax: (815) 381-5647

February 24, 2008

Illinois Environmental Protection Agency (IEPA)
Bureau of Air
Office of Air Quality
Compliance Section (MC-40)
P.O. Box 19276
1021 North Grand Avenue East
Springfield, IL 62794-9276

RECEIVED

FEB 2 9 2008

Environmental Protection Agency Bureau of Air STATE OF ILLINOIS

Re:

2007 Semi-annual Gas Collection and control System Report (July 1, 2007 -

December 31, 2007) Winnebago Landfill

CAAPP Application No. 99020102, I.D. No. 201801AAF

Winnebago Reclamation Service respectfully submits the enclosed report to meet compliance with 40 CFR Part 60, Subpart WWW, New Source Performance Standards for municipal solid waste landfills and 40 CFR 63 Subparts A and AAAA, National Emission Standard for Hazardous Air Pollutants for municipal solid waste landfills.

Enclosed is the Landfill Gas Collection and Control System (GCCS) Semi-Annual Report covering the period from July 1, 2007 through December 31, 2007. If you have any questions, please do not hesitate to contact me at 815-963-7533.

Sincerely,

Winnebago Reclamation Service

Evan Buskohl

Environmental Manager

QNX 3

Enclosure:

Form 400-CAAPP

Semi-Annual GCCS Report

cc:

Peoria Regional Office – IEPA-DAPC

Winnebago Landfill Site File

Sultana Haque – Cornerstone Environmental Group. LLC



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE								
Revision #:								
Date:	_ / _		. /					
Page		of .						
Source Desi	gnati	on:						

COMPLIANCE AND GENERAL	,
REPORTING FORM	

FOR AGENCY USE ONLY	
ID NUMBER:	•
PERMIT #:	
DATE:	-

THIS FORM IS USED FOR EITHER OF THE FOLLOWING:

- TO REPORT AND CERTIFY COMPLIANCE OF AN ENTIRE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS DURING A REPORTING PERIOD, OR
- TO IDENTIFY AND ENSURE PROPER PROCESSING OF A SUBMITTED REPORT. THIS FORM SHOULD BE USED AS THE COVER SHEET OF THE SUBMITTED REPORT.

SOURCE	EINFORMATION							
1) SOURCE NAME: Winnebago Landfill								
2) DATE FORM	3) SOURCE ID NO.							
PREPARED: February 24, 2008	(IF KNOWN); 201801AAF							
, , , , , , , , , , , , , , , , , , , ,								
GENERA	LINFORMATION							
4) INDICATE FOR WHICH OF THE FOLLOWING THIS FO	DRM IS BEING COMPLETED:							
TO REPORT AND CERTIFY COMPLIANCE OF THE SOURCE OR SPECIFIC ITEMS OF EQUIPMENT WITH ALL APPLICABLE REQUIREMENTS								
TO IDENTIFY AND ENSURE PROPER PROCES	SSING OF A SUBMITTED REPORT							
5) PERIOD COVERED BY THIS REPORT:								
FROM: <u>07</u> / <u>01</u> / <u>2007</u>	TO: <u>12</u> / <u>31</u> / <u>2007</u>							
6) NAME AND PHONE NUMBER OF PERSON TO CONTA	ACT FOR QUESTIONS REGARDING THIS REPORT:							
NAME: <u>Evan Buskohl</u>	TITLE: <u>Environmental Manager</u>							
PHONE#: <u>(815) 963-7533</u> EXT:								

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 1 _____

CCMPLIANCE OF SOURCE OR EQUIPMENT DURING REPORTING PERIOD
COMPLETE ITEM 7 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF THE ENTIRE SOURCE.
COMPLETE ITEM 8 BELOW IF THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE OF SPECIFIC ITEMS OF EQUIPMENT ONLY.
7) WAS THE SOURCE IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE Yes No ENTIRE REPORTING PERIOD?
IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.
IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 -"EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."
8a) LIST THE EMISSION UNIT(S) AND CONTROL EQUIPMENT FOR WHICH THIS FORM IS BEING COMPLETED TO REPORT AND CERTIFY COMPLIANCE WITH (IF ADDITIONAL SPACE IS NEEDED FOR ITEM 10, ATTACH AND LABEL AS EXHIBIT 400-A):
b) IDENTIFY THE APPLICABLE REQIREMENT(S) FOR WHICH THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE WITH:
c) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRE THAT THIS REPORT OR CERTIFICATION BE SUBMITTED:
d) WERE THE ABOVE REFERENCED ITEMS IN 8(a) IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD?
IF YES, THEN THE "REPORT INFORMATION" SECTION ON PAGE 3 OF THIS FORM DOES NOT NEED TO BE COMPLETED.
IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 - "EXCESS EMISSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."

REPORT INFORMATION
9) TITLE OF REPORT BEING SUBMITTED:
Semi-Annual NSPS Compliance Report
10) IDENTIFY THE APPLICABLE REQIREMENT(S) WHICH REQUIRES THIS REPORT (IF APPLICABLE):
Permit Condition 7.1.3 and 7.1.10 of CAAPP Permit No. 99020102. Permit Condition 5.2.5 of CAAPP Permit No. 99020102.
11) BRIEFLY EXPLAIN WHAT THIS REPORT COVERS:
Semi-annual NSPS compliance monitoring and reporting requirements for the GCCS at the facility as required by 40
CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA.
12) ATTACH THE REPORT TO THIS FORM.
SIGNATURE BLOCK
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.
13) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.
AUTHORIZED SIGNATURE:

AUTHORIZED SIGNATURE

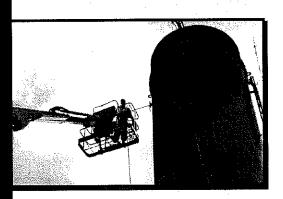
Thomas Hilbert

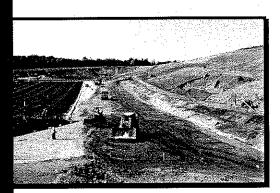
TYPED OR PRINTED NAME OF SIGNATORY

Vice President
TITLE OF SIGNATORY

February 25, 2008







Winnebago Landfill Landfill Gas Collection and Control System Semi-annual Report July 1, 2007 – December 31, 2007

RECEIVED

Project 70104 February 2008

FEB 29 2008

Environmental Protection Agency Bureau of Air STATE OF ILLINOIS

Prepared for: Winnebago Reclamation Services



Winnebago Landfill 8403 Lindenwood Road Rockford, Illinois 61109



39395 W. Twelve Mile Rd., Suite 103, Farmington Hills, MI 48331

Landfill Gas Collection and Control System Semi-annual Report July 1, 2007 - December 31, 2007 Winnebago Landfill Rockford, Illinois

The material and data in this report were prepared under the supervision and direction of the undersigned.

Cornerstone Environmental Group, LLC

Gulterna Hergue

Khaled Mah smood

Sultana Haque

Project Engineer

Khaled Mahmood, P.E. Senior Project Manager

TABLE OF CONTENTS

I INTRODUCTION	1-1
1.1 PURPOSE	1-1
EXISTING SITE CONDITIONS	2-1
2.1 LANDFILL DESCRIPTION	2-1 2-1
SEMI-ANNUAL REPORT REQUIREMENTS	3-1
3.1 SEMI-ANNUAL REPORT REQUIREMENTS	3-1
SEMI-ANNUAL REPORT	4-1
4.1 Wellfield Monitoring	4-1 4-1 4-2 4-2 4-3 4-3 4-3 4-3

APPENDICES

APPENDIX A AS-BUILT GCCS DRAWING

APPENDIX B MONTHLY WELLHEAD MONITORING RESULTS

APPENDIX C CONTROL DEVICE DOWNTIME RECORDS

APPENDIX D QUARTERLY SURFACE EMISSIONS MONITORING RESULTS

APPENDIX E CORRESPONDENCES



1 INTRODUCTION

1.1 Purpose

This document serves as a landfill gas collection and control system (GCCS) semi-annual report for the Winnebago Landfill pursuant to 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW, New Source Performance Standards (NSPS) for municipal solid waste landfill and 40 CFR Part 63, Subparts A and AAAA, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for municipal solid waste landfills. The purpose of this report is to provide performance documentation in accordance with the NSPS requirements for the GCCS at Winnebago Landfill for the referenced reporting period.

1.2 Record Keeping and Reporting

This report is being submitted pursuant to 40 CFR §60.757(f) and 40 CFR §63.1980. Records will be prepared and maintained in accordance with 40 CFR §60.758 and 40 CFR §63.1980. The primary location for records storage will be at the Winnebago Landfill facility.

2 EXISTING SITE CONDITIONS

2.1 Landfill Description

Winnebago Landfill, owned and operated by Winnebago Reclamation Service (WRS), is located in Rockford, Illinois and accepts municipal and other wastes under operating permit number 1991-138-LF issued by the Illinois Environmental Protection Agency (IEPA).

The Winnebago Landfill contains several separate fill areas as follows:

- The area filled to final grade, known as the north unit, is approximately 42.7 acres with an active GCCS.
- The active waste filling area, known as the south unit, is approximately 27.5 acres. An active GCCS is installed in portions of the south unit.

2.2 Landfill Gas Collection and Control System

A GCCS has been installed and currently operates in the areas filled to final grade or in active areas where the waste is five or more years old. The existing GCCS consists of approximately 32 vertical extraction wells in the north unit, 28 vertical extraction wells in the south unit and three horizontal collectors in each of north and south unit. These extraction wells convey the landfill gas (LFG) from the refuse, through a series of lateral and header pipes, to a flare station for destruction. Two flare stations, one for the north unit collection system and one for the south unit collection system, are located at the facility. The north unit flare is backed up by an enclosed flare.

The Winnebago Energy Center (WEC) installed a landfill gas treatment system and four landfill gas (LFG) fired combustion engines at the new gas-to-energy facility that utilizes treated LFG collected from the Winnebago Landfill to generate electricity. The engines started operating from December 28, 2007 and the two existing open flares have been used as backup to the WEC to control LFG when the LFG treatment system and engines are not in service or flow of FLG is greater than the energy facility can handle. The A copy of the updated GCCS drawing has been included in Appendix A.



3 SEMI-ANNUAL REPORT REQUIREMENTS

In accordance with §60.757(f) and §63.1980(a) a semi-annual report must be submitted to the regulatory agency by applicable facilities, which contains performance and monitoring data for the operation of the GCCS.

3.1 Semi-Annual Report Requirements

The requirements under the semi-annual report are as follows:

- 1. Value and length of time for exceedance of parameters monitored under §60.756(a), (b), (c), and (d) which include:
 - Monthly recording of gauge pressure at all wellheads, all wells must operate under negative pressure conditions
 - Monthly monitoring of oxygen or nitrogen concentrations at all wellheads, oxygen be less than 5% or nitrogen must be less than 20%
 - Monthly monitoring of temperatures at all wellheads, temperature be less than 55°C (131°F)
 - For open flares, all periods where landfill gas flow is not recorded at least once every 15 minutes and presence of flame is not continuously indicated
 - For enclosed combustors with a heat input capacity less than 44 megawatts, all periods where landfill gas flow is not recorded at least once every 15 minutes and temperature is not recorded continuously. Also, all three hour periods during which the average combustion temperature was more than 28°C below the average temperature recorded during the performance test for the control device.
 - Report all 3-hour averaging block of numerical continuous parameter (i.e., combustion temperature) monitoring data containing at least one hour of invalid data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. Data collected during any of the events described in 40 CFR 63.1975 (monitoring system breakdowns, repairs, calibration checks; control device startup, shutdowns and malfunctions) are not to be included in any 3-hour averaging block (40 CFR 63.1955 40 CFR 63.1975).



- 2. Description and duration of all periods when the gas stream was diverted from the control device through a bypass line.
- 3. Description and duration of all periods when the control device was not operating for greater than one hour and the length of time that the device was not operating.
- 4. All periods greater than five (5) days when the collection system was not operating.
- 5. Location and concentration of all surface emission exceedances (≥ 500 ppm above background).
- 6. Date of installation and location of all wells or system expansions both planned and as the result of monitoring exceedances.

4 SEMI-ANNUAL REPORT

The information included in this section and applicable appendices, satisfies the requirements under §60.757(f) for the semi-annual report. The reporting period covered in this report is from January 1, 2007 through June 30, 2007.

4.1 Wellfield Monitoring

Monitoring data for the GCCS has been collected, at a minimum, on a monthly frequency for inclusion in the Winnebago Landfill's semi-annual report. Site personnel at Winnebago Landfill were responsible for collecting data. Wellhead monitoring data (pressure, temperature, and oxygen concentration) was recorded using a LANDTEC GEM-500. A complete copy of the results for the monthly monitoring is included in Appendix B.

Three gas wells (GWS02, GWS04, and GWS06) in the South Unit were damaged during filling activities in the vicinity of these wells in June 2007. These wells were not monitored during July through October 2007. The wells were replaced when waste disposal was ceased in the area and monthly monitoring of the replaced wells began from November 2007.

Monthly monitoring, corrective measures, and 15-day re-monitoring were conducted at the facility in accordance with the Title V permit and the NSPS regulations. In most cases, there were no exceedances of the operational parameters at the wellheads. A description of the instances when corrective actions were needed or did not prove to be sufficient are detailed below.

4.1.1 Temperature

There was no exceedance of temperature during the reporting period covered in this report.

4.1.2 Oxygen

Gas Extraction well GW102 exhibited oxygen concentration higher than 5% beginning August 30, 2007. The well was removed from service in February 2006. This gas well was a poor producing LFG well with an average methane concentration of less than 30%. Other gas extraction wells in the area provided sufficient coverage as was indicated by surface emission monitoring results in the area. Well 102 was returned to service in February 2007 and monthly monitoring results indicated that the well was operating with oxygen concentration higher than 5% during most of the monitoring period in 2007. The



well showed methane concentration of less than 30% during most of the monthly monitoring events and Compliant operating parameters were not able to be maintained consistently during 2007 monitoring event. On September 13, 2007, the Winnebago Reclamation Service submitted a letter to the Illinois Environmental Protection Agency (IEPA) requesting decommissioning of well GW102. On September 24, 2007, the IEPA approved permanent decommissioning of the well. A copy of the IEPA approval has been included in Appendix E.

4.1.3 Pressure

There was no exceedance for pressure during the reporting period covered in this report.

Monthly wellfield monitoring, corrective actions and any records of remonitoring were conducted and records are kept on file.

4.2 LFG Bypass Operations

No bypass line has been installed. Therefore, during the period encompassed under this report, LFG was not diverted through a bypass line.

4.3 Control Device Operation

The primary control devices for the Winnebago Landfill are two open flares and landfill gas treatment system. The north unit flare controls landfill gas collected from the north unit of the Winnebago Landfill. The south unit flare controls landfill gas collected from the south unit of the Winnebago Landfill. An enclosed flare is available as a back-up control for the north unit.

The operating records for the north unit flare, south unit flare, and enclosed flare were reviewed for the reporting period. There were seventeen (17) instances where the north unit flare or the south unit flare were down for more than 1 hour. Operating records for the flares are maintained at the site. A summary of downtime events greater than 1 hour is included in Appendix C.

The enclosed flare is used as a backup device to the north unit open flare and did not operate during the reporting period covered in this report. Therefore, there was no landfill gas flow or combustion temperature to be monitored or recorded.

During this reporting period there were no 3-hour averaging blocks of numerical continuous parameter monitoring data that contained at least one hour of invalid data as described in §40 CFR 63.1965 and §40 CFR 63.1975.



4.4 Collection System Operation

During the period encompassed under this report, the gas collection system was not shutdown for more than five days on any occasion.

4.5 Surface Emissions Monitoring

Quarterly surface emission monitoring was performed by Andrews Environmental Engineering, Inc. using a flame ionization detector/photo ionization detector (FID/PID) as required under §60.755(c)(3). Testing was conducted around the perimeter of the collection area and in a serpentine pattern across the collection area as depicted in the surface emissions monitoring plan included in the previously submitted GCCS design plan.

Surface emissions monitoring for the third and fourth quarter of 2007 were conducted on September 25, 2007 and December 31, 2007 respectively. No exceedances of the 500 ppm background concentration were detected at Winnebago Landfill during either monitoring event.

Results of surface emissions monitoring events are maintained at the Winnebago Reclamation Service offices and are included in Appendix D.

4.6 Collection System Expansion

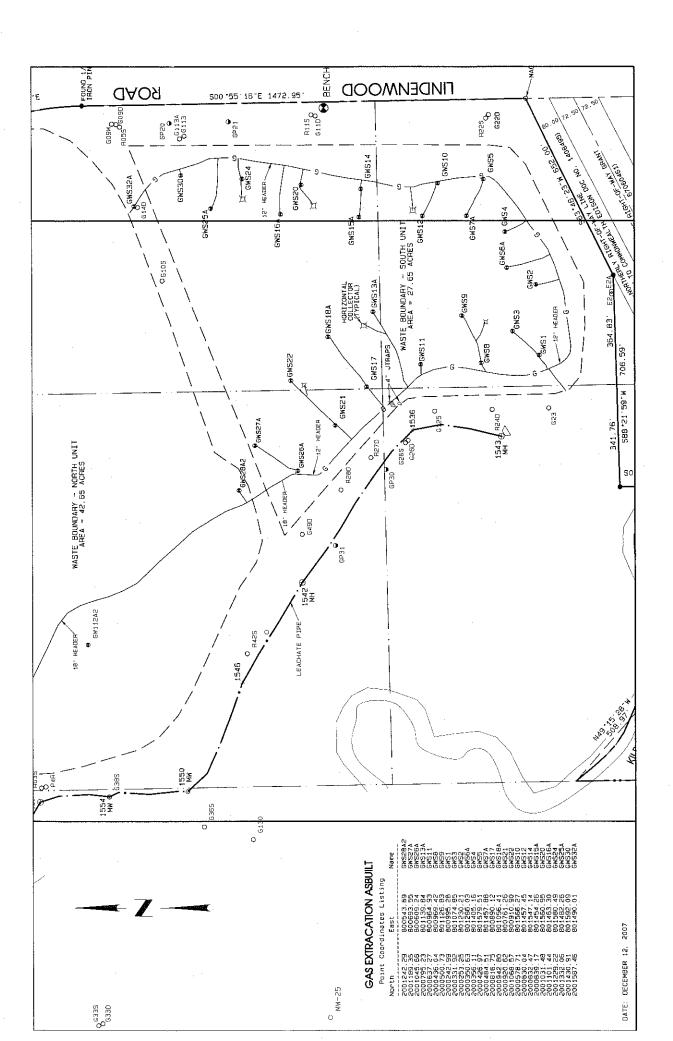
No additional extraction devices were installed during the period encompassed under this report due to operational parameter exceedances. During the reporting period, fourteen (14) new LFG wells (GWS7A, GWS09, GWS12A, GWS13A, GWS15A, GWS16A, GWS18A, GWS21A, GWS22A, GWS25A, GWS26A, GWS27A, GWS28A and GWS32) and three (3) replacement wells (GWS2A, GWS4A and GWS6A) were added due to normal GCCS expansion. All the newly installed and replaced wells were brought on-line and monitored during December 2007.

LIMITATIONS

The work product included in the attached was undertaken in full conformity with generally accepted professional consulting principles and practices and to the fullest extent as allowed by law we expressly disclaim all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose. The work product was completed in full conformity with the contract with our client and this document is solely for the use and reliance of our client (unless previously agreed upon that a third party could rely on the work product) and any reliance on this work product by an unapproved outside party is at such party's risk.

The work product herein (including opinions, conclusions, suggestions, etc.) was prepared based on the situations and circumstances as found at the time, location, scope and goal of our performance and thus should be relied upon and used by our client recognizing these considerations and limitations. Cornerstone shall not be liable for the consequences of any change in environmental standards, practices, or regulations following the completion of our work and there is no warrant to the veracity of information provided by third parties, or the partial utilization of this work product.

APPENDIX A AS-BUILT GCCS DRAWING



APPENDIX B MONTHLY WELLHEAD MONITORING RESULTS

Winnebago Landfill Gas Extraction 7/24/07

Device ID	Date/Time	CH4	CO2	02	Balance	SP	Temp	Adj. Flow
		%	%	%	%			Scfm
WinGWFLA	7/24/2007 15:17	45.5	32.9	1.5	20.09	0.9	877	858
WinGW100	7/24/2007 13:07	44.4	28.7	1	25.89	-3.2	91	0
WinGW101	7/29/2007 14:26	42	26.2	0.8	31	-15.9	96	0
WinGW102	7/24/2007 13:17	58.9	33	0.5	7.59	-0.1	102	0
WinGW103	7/24/2007 13:20	48.3	34.1	1.5	16.1	-2.2	99	0
WinGW110	7/24/2007 13:04	48.4	33.6	1	. 17	-1.7	97	0
WinGW111	7/24/2007 13:59	54.7	38.6	0.3	6.4	-0.9 .	112	0
WinGW112	7/24/2007 14:01	54.8	39	0.3	5.9	-0.2	109	0
WinGW113	7/24/2007 13:36	44.6	31.5	0.3	23.6	-3.9	95	0
WinGW120	7/24/2007 13:00	32.8	23.1	2.8	41.3	-12	85	0
WinGW121	7/24/2007 13:56	47.7	37.2	0.4	14.69	-9	92	0
WinGW122	7/24/2007 14:05	58.5	41.3	0	0.2	-0.2	95	0
WinGW123	7/24/2007 13:39	46.4	32.9	0.7	19.99	-9	95	0
WinGW130	7/24/2007 12:56	37.4	26.8	0.4	35.39	-20.7	78	0
WinGW131	7/24/2007 13:54	51.8	37	0.3	10.9	-15.1	95	0, .
WinGW132	7/24/2007 13:50	57.9	41.2	0.1	0.79	-2.2	105	0
WinGW133	7/24/2007 13:47	59.3	40.5	0.1	0.1	-0.4	104	0
WinGW134	7/24/2007 13:43	61.3	31.8	0.5	6.4	-6.6	85	0
WinGW140	7/24/2007 12:51	36.2	28	3.1	. 32.7	-14.8	99	0
WinGW141	7/24/2007 14:36	56.7	41.3	0.2	1.8	-0.1	105	0
WinGW142	7/24/2007 14:09	57.8	39.5	0	2.7	-28.3	100	0
WinGW150	7/24/2007 14:46	48.7	32.3	0.2	18.79	-32	64	0
WinGW151	7/24/2007 14:34	42.8	33.4	1.4	22.4	-8.2	103	0
WinGW152	7/24/2007 14:53	48.7	35.8	2.8	12.7	-37.6	92	. 0
WinGW160	7/24/2007 12:44	54.1	33	0.1	12.8	-12.7	97	0
WinGW161	7/24/2007 14:32	55.7	40.7	0.4	3.19	-2	93	0
WinGW162	7/26/2007 16:08	47	. 35.1	3.4	14.5	-24.4	91	0
WinGW170	7/24/2007 12:39	67.5	32.3	0	0.2	-1.1	102	0
WinGW171	7/24/2007 15:04	57.2	40.1	0.9	1.8	-0.8	103	0
WinGW180	7/24/2007 12:31	63.8	32.8	0	3.4	-0.7	95	0
WinGW181	7/24/2007 14:28	40.2	32.2	0.2	27.39	-15.4	99	0
WinGW190	7/24/2007 12:25	62.4	34.6	0	3	-0.5	97	0
WinGW191	7/24/2007 12:16	61.2	38.7	0	0.09	-7.3	98	0
WINGWEEH	7/24/2007 15:06	46.1	34.4	1.6	17.9	-36.8	107	0
WINGWEMH	7/24/2007 14:20	51.5	37	0.8	10.7	-12.5	90	0
WINGWEWH	7/24/2007 14:15	32.3	27.4	2.4	37.89	-18.2	115	0

Winnebago Landfill Gas Extraction 8/30/07

Device ID	Date/Time		CO2	O2	Balance	SP		Adj. Flow	Vacuum	Comments
Device ib	Date/Time	%	%	%	%	0.	, 0,,,p	Scfm	(adj Flow)	
	8/31/2007 10:21	42.2	32.2	1.8	23.8	1.1	955	857	. (a ., 71017). 52	·
WinGW100	8/30/2007 11:44	30.7	25.5	3.4	40.4	-7.1	80	0	0	Decreased 1/4
WinGW101	8/30/2007 11:51	28.3	28.2	0.2	43.29	-10	75	0	0	Decreased 1/4
WinGW101	8/30/2007 11:59	14.4	11.8	11.9	61.89	-5.2	110	0	0	Closed
WinGW102	8/30/2007 12:06	44.7	34.1	2.3	18.9	-3.9	91	0	0	Decreased 1/4
WinGW100	8/30/2007 11:12	43.8	30.6	2.3	23.3	-4.4	80	0	0	Decreased 17 7
WinGW111	8/30/2007 13:47	50.7	38.1	0.4	10.8	-3.6	115	0	0	
WinGW111	8/30/2007 13:54	57.3	42.3	0.2	0.2	-1.5	97	0	0	Increased 1/4
WinGW113	8/30/2007 12:20	35.7	29.6	0.6	34.1	-6	95	0	0	,
WinGW120	8/30/2007 11:03	31.9	26	0.9	41.19	-13.5	75	0	0	Decreased 1/4
WinGW121	8/30/2007 13:38	42.5	35.9	0.4	21.2	-11.7	90	0	0	, ·
WinGW122	8/30/2007 13:59	42	33.8	2.1	22.1	-3	98	0	0	Decreased 1/4
WinGW123	8/30/2007 12:26	42.8	33.5	0.1	23.6	-11.4		0	0	
WinGW130	8/30/2007 10:56	35.9	27.6	0	36.5	-22.7	90	0	0	
WinGW131	8/30/2007 13:34	49.3	37.3	0.5	12.9	-19.4	94	0	0	Decreased 1/4
WinGW132	8/30/2007 14:05	58.3	41.4	0.2	0.09	-1.1	101	0	0	Decreased 1/4
WinGW133	8/30/2007 12:59	41.9	29.7	4.6	23.79	-13.1	97	0	0	Decreased 1/2
WinGW134	8/30/2007 12:35		33.1	1.4	10.1	-10.3	84	0	0	Decreased 1/4
WinGW140	8/31/2007 9:56	40.4	29.1	2.2	28.29	-29.8	85	0	0	Decreased 1/4
WinGW141	8/31/2007 10:03	40.1	29.6	2.4	27.9	-40	102	0	0	Decreased 1/4
WinGW142	8/30/2007 14:16	58.9	38.9	0.1	2.09	-33	98	0.	0	
WinGW150	8/30/2007 10:48	50.7	34	0.1	15.19	-34.9	60	0	0	
WinGW151	8/31/2007 9:43	44.3	34.9	1.4	19.4	-11.6	103	0	0	Decreased 1/4
WinGW152	8/30/2007 14:23	52.3	37.7	2.1	7.9	-41.7	96	0	0	
WinGW160	8/30/2007 10:36	48.3	33	0.5	18.2	-20.2	81	0	0	
WinGW161	8/31/2007 9:33	57.7	41.8	0.3	0.19	-5.7	84	0	0	
WinGW162	8/31/2007 9:37	46.5	34.8	4.3	14.4	-24.9	84	0	0	Decreased 1/4
WinGW170	8/30/2007 10:18	52.5	34.4	0	13.09	-26.7	93	0	0	
WinGW171	8/31/2007 9:13	51.6	38.8	1.5	8.1	-7.4	104	0	0	Decreased 1/4
WinGW180	8/30/2007 10:10	37.4	31.3	0	31.3	-27.7	90	0	0	
WinGW181	8/31/2007 9:28	42.1	34.6	0.1	23.2	-20.9	99	0	0	
WinGW190	8/30/2007 10:04	37	27.8	0	35.2	-15.8	107	0	0	
WinGW191	8/30/2007 9:43	59.5	39.9	0.4	0.19	-20.3	98	0	0	
WINGWEEH	8/31/2007 9:18	42.9	33.7	2.2	21.19	-42.6	95	0	0	Decreased 1/4
WINGWEMH	8/30/2007 14:37	56.1	39.5	0.3	4.1	-22.1	90	0	0	Decreased 1/4
WINGWEWH	8/30/2007 14:29	31.8	28.2	3.2	36.79	-23.3	115	0	0	Decreased 1/4

Winnebago Landfill Gas Extraction 9/27/07

Device ID	Date/Time		CO2	O2	Balance	SP	Temp	Adj. Flow	Vacuum	Comments
201.0012	5 ato. 1 mile	%	%	%	%	-"	۹۵	Scfm	(adj Flow)	
WinGWFLA	9/27/2007 14:07	42.9	31.9	2.2	22.99	1.4	909	858	· ` ´ 55	
WinGW100	9/27/2007 11:54	42.3	31.2	0.7	25.8	-3.3	77	0	0	Increased 1/4
WinGW101	9/27/2007 11:57	36.7	30.1	0	33.19	-8.6	82	0	0	Increased 1/4
WinGW102	9/27/2007 12:02	25.6	19.7	7.2	47.5	-1.5	99	0	0	Closed
WinGW103	9/27/2007 12:05	60.6	35.9	1.1	2.4	-0.5	78	0	0	Increased 1/4
WinGW110	9/27/2007 11:51	51.5	35.7	0.2	12.6	-2.3	80	0	0	Increased 1/4
WinGW111	9/27/2007 12:35	54.7	39.9	0.3	5.09	-1.8	113	0	0	Increased 1/4
WinGW112	9/27/2007 12:43	56.8	43.1	0	0.1	-0.2	100	0	0	Increased 1/4
WinGW113	9/27/2007 12:09	49.4	33.5	0	17.09	-2.2	87	0	0	Increased 1/4
WinGW120	9/27/2007 11:43	37.3	27.6	0.5	34.59	-9.1	69	0	0	Increased 1/4
WinGW121	9/27/2007 12:33	50.4	38.2	0.2	11.19	-9.9	90	0	0	Increased 1/4
WinGW122	9/27/2007 12:46	58.1	41.7	0.1	0.1	-0.2	91	0	0	Increased 1/4
WinGW123	9/27/2007 12:12	54.8	36.4	0	8.79	-4.8	92	0	0	Increased 1/4
WinGW130	9/27/2007 11:40	36.8	29	0	34.2	-22.5	71	0	0	
WinGW131	9/27/2007 12:31	52.2	38.6	0.2	9	-16.3	90	0	0	
WinGW132	9/27/2007 13:56	57.4	42	0.4	0.19	-0.1	102	0	0	Increased 1/4
WinGW133	9/27/2007 12:23	49	34.8	3.3	12.9	-1.6	97	0	0	Increased 1/4
WinGW134	9/27/2007 12:19	65.2	34.1	0.6	0.1	-3.1	75	0	0	Increased 1/4
WinGW140	9/27/2007 11:30	33.8	27.2	4.4	34.59	-21.3	82	0	0	Decreased 1/4
WinGW141	9/27/2007 12:49	57.4	42.5	0	0.09	-0.2	96	0	0	Increased 1/4
WinGW142	9/27/2007 13:02	60.2	39.3	0.4	0.09	-28.3	96	0	0	
WinGW150	9/27/2007 11:28	47.9	34.3	0	17.79	-35.8	65	0	0	
WinGW151	9/27/2007 13:33	46.6	35.7	1.1	16.6	-9.2	97	0	0	
WinGW152	9/27/2007 13:36	46.8	35.2	4.1	13.9	-42.4	86	0	0	Decreased 1/4
WinGW160	9/27/2007 11:24	47.6	34.1	0.1	18.2	-20.5	78	0	0	
WinGW161	9/27/2007 13:31	57.4	42.3	0.2	0.09	-2.8	83	0	0	
WinGW162	9/28/2007 14:19	49.4	36.9	3.5	10.19	-21.3	90	0	0	Decreased 1/4
WinGW170	9/27/2007 11:21	51.7	34.6	0.1	13.6	-27.9	92	0	0	
WinGW171	9/27/2007 13:10	53.5	39.2	0.8	6.49	-3.2	104	0	0	
WinGW180	9/27/2007 11:18	37.2	31.7	0.1	30.99	-28.7	90	. 0	0	
WinGW181	9/27/2007 13:17	39.9	33.1	0.2	26.8	-18.3	97	0	0	
WinGW190	9/27/2007 11:16	35.5	27.7	0	36.8	-14.5	110	0	0	Increased 1/4
WinGW191	9/27/2007 11:11	59.7	39.8	0.3	0.19	-18.6	94	0	0	
WINGWEEH	9/27/2007 13:12	49.1	36.5	0.6	13.8	-42.8	100	0	0	
WINGWEMH	9/27/2007 13:07		39.7	0.3	2.7	-19.3	90	0	0	
WINGWEWH	9/27/2007 12:56	36.4	29.8	2.6	31.2	-23.2	116	0	0	Decreased 1/4

Winnebago Landfill Gas Extraction 10/10/07

Device ID	Date/Time	CH4	CO2	02	Balance	SP	Temp	Adj. Flow	Vacuum	Comments
		%	%	%	%			Scfm	(adj Flow)	
WinGWFLA	10/10/2007 15:14	44.7	33.7	1.3	20.29	8.0	944	787	54	
WinGW100	10/10/2007 12:14	38.3	30.7	0.4	30.6	-4.4	63	0	0	
WinGW101	10/10/2007 12:19	34	30.3	0	35.7	-9.1	78	0	0	
WinGW102	10/10/2007 12:23	18.4	13.7	11.2	56.7	-0.9	67	0	0	
WinGW103	10/10/2007 12:28	58.2	34.5	2	5.29	-1.4	60	0	0	
WinGW110	10/10/2007 12:09	47.1	34.1	0.7	18.1	-3.7	71	0	0	
WinGW111	10/10/2007 13:44	51.3	38.4	8.0	9.49	-2.5	112	0	0	Decreased 1/4
WinGW112	10/10/2007 13:36	53.2	40.6	0	6.2	-1.2	123	0	0	
WinGW113	10/10/2007 12:33	45.2	34	0.1	20.7	-3.7	82	0	0	
WinGW120	10/10/2007 11:56	33.1	24.9	2	40	-9.9	60	0	0	Decreased 1/4
WinGW121	10/10/2007 13:48	48.8	38.2	0.1	12.9	-10.1	87	0	0	
WinGW122	10/10/2007 13:27	56.1	43.6	0.2	0.1	-0.5	70	0	0	
WinGW123	10/10/2007 12:39	56.1	37.4	0	6.5	-6	92	0	0	•
WinGW130	10/10/2007 11:51	37.2	28.9	0	33.9	-21.6	71	0	0	
WinGW131	10/10/2007 13:52	53.8	38.9	0	7.29	-16.2	84	0	0	
WinGW132	10/10/2007 13:06	55.9	44	0	0.09	-0.3	81	0	0	Increased 1/4
WinGW133	10/10/2007 12:56	49.3	35.3	3.5	11.9	-2.1	92	0	0	Decreased 1/4
WinGW134	10/10/2007 12:50	63.2	34.6	8.0	1.4	-4.6	66	0	0	
WinGW140	10/10/2007 11:45	45.5	34.3	0.1	20.1	-17.3	75	. 0	0	
WinGW141	10/10/2007 13:58	56	43.9	0	0.09	-0.1	75	0	0 -	Increased 1/4
WinGW142	10/10/2007 14:02	59.9	40	0	0.09	-32.5	95	0	0	
WinGW150	10/10/2007 11:30	51.2	34.9	0	13.89	-22.2	65	0	0	
WinGW151	10/10/2007 14:56	48.1	36.9	0.7	14.3	-8.9	97	0	0	
WinGW152	10/10/2007 14:07	55	40.6	1.1	3.3	-21.1	66	0	0	
WinGW160	10/10/2007 11:19	47.5	33.6	0.3	18.6	-19.1	71	0	0	
WinGW161	10/10/2007 14:49	56.6	43.3	0	0.1	-2.7	61	0 -	0	
WinGW162	10/10/2007 14:20	48.6	36.9	3.2	11.3	-30.7	81	0	0	Decreased 1/4
WinGW170	10/10/2007 11:13	43.6	31.1	2.4	22.9	-26.7	90	0	0	Decreased 1/4
WinGW171	10/10/2007 14:28	55.5	44.4	0	0.09	-2.5	104	0	0	
WinGW180	10/10/2007 11:04	40.9	32.3	0	26.8	-27.6	87	0	0	
WinGW181	10/10/2007 14:39	41.3	34.9	0	23.8	-18	95	0	0	
WinGW190	10/10/2007 10:59	40.6	28.2	0	31.2	-13	111	0	0	
WinGW191	10/10/2007 10:54	58.9	40.7	0.2	0.19	-17.9	91	0	. 0	
WINGWEEH	10/10/2007 14:32	49.6	37.2	0.5	12.7	-42.5	100	0	0	
WINGWEMH	10/10/2007 14:23	57.3	39.9	0	2.79	-15.9	88	. 0	0	
WINGWEWH	10/10/2007 14:10	37.1	30.7	2.1	30.1	-21.7	116	0	0	Decreased 1/4

Winnebago Landfill Gas Extraction 11/27/07

Device ID	Date/Time		CO2	O2	Balance	SP		Adj. Flow	Vacuum	Comments
	2 41.0. 1 11.1.	%	%	%	%			Scfm	(adj Flow)	
WinGWFLA	11/27/2007 16:27	43.7	31.2	2.5	22.59	0.3	1122	838	46	
WinGW100	11/27/2007 15:28	44	30.6	0	25.4	-4.5	58	0	0	Increased 1/4
WinGW101	11/27/2007 15:31	37.2	28.3	1	33.5	-8.7	73	0	0	
WinGW102	11/27/2007 15:33	15.2	12.6	12.1	60.1	-1.3	54	0	0	
WinGW103	11/27/2007 15:37	58.5	34.3	1.1	6.1	-15.6	86	0	0	Increased 1/4
WinGW110	11/27/2007 15:26	51.8	34.4	0	13.79	-3.8	59	0	0	Increased 1/4
WinGW111	11/27/2007 12:45	56.1	34.5	1.1	8.3	-2.7	105	0	0	Increased 1/4
WinGW112	11/27/2007 12:49	57.1	42.5	0.2	0.2	-1.6	100	0	0	Increased 1/4
WinGW113	11/27/2007 15:39	48.6	33.4	0	18	-4.4	73	0	0	Increased 1/4
WinGW120	11/27/2007 15:20	35.2	25	1.5	38.3	-10.8	51	0	0	
WinGW121	11/27/2007 12:42	53.8	38.4	0.2	7.59	-6	85	0	0	Increased 1/4
WinGW122	11/27/2007 12:51	57.7	39.9	0	2.39	-0.8	50	0	0	Increased 1/4
WinGW123	11/27/2007 15:42	57.5	36.4	0	6.09	-6.6	88	0	0	
WinGW130	11/27/2007 15:17	37	27.8	0.2	35	-18.4	61	0	0	
WinGW131	11/27/2007 12:40	55.9	37.7	0.4	5.99	-14.4	79	0	0	
WinGW132	11/27/2007 12:36	57.3	42.6	0	0.1	-1.6	55	0	0	Increased 1/4
WinGW133	11/27/2007 12:53	45.9	32.8	4.2	17.09	-2	86	0	0	Decreased 1/4
WinGW134	11/27/2007 15:46	62.4	33.7	0.7	3.19	-5.6	57	0	0	
WinGW140	11/27/2007 12:27	49.7	33.3	0	17	-15.5	70	0 .	0	
WinGW141	11/27/2007 12:32	57.1	42.8	0	0.1	-0.7	70	0	0	Increased 1/4
WinGW142	11/27/2007 12:58	61.2	38.6	. 0	0.2	-30	88	0	0	
WinGW150	11/27/2007 12:25	51.8	33.6	0	14.6	-16.6	64	. 0	0	
WinGW151	11/27/2007 13:24	48.9	35.4	8.0	14.89	-8.8	95	0	0	
WinGW152	11/27/2007 13:02	56.8	40.9	0.6	1.69	-17.9	54	0	0	
WinGW160	11/27/2007 12:20	52.7	33.5	0.4	13.4	-16.7	68	0	0	
WinGW161	11/27/2007 13:22		42.5	0	0.09	-2.8	40	0	0	Increased 1/4
WinGW162	11/27/2007 13:08	44.3		4.4	17.9	-26.3	60	0	0	Decreased 1/4
WinGW170	11/27/2007 12:18		28.1	4	25.1	-21.9	88	0	0	Decreased 1/4
WinGW171	11/27/2007 13:13	57.8	41.9	0.2	0.09	-1.6	103	0	0	Increased 1/4
WinGW180	11/27/2007 12:16		30.3	0.5	27.8	-24.3	77	0	0	
WinGW181	11/27/2007 13:19	46.1	35	0	18.9	-16.4	94	0	0	
WinGW190	12/4/2007 13:14	65.6	29	0	5.4	-0.3	93	0	0	Increased 1/4
WinGW191	11/27/2007 12:07	61.2	38	0.4	0.39	-15.6	87	0	0	
WINGWEEH	11/27/2007 13:15	37.9	29.7	3.9	28.49	-37.7	101	• 0	0	Decreased 1/4
WINGWEMH	11/27/2007 13:09	55.9	38.2	0	5.89	-13.5	83	0	0	
WINGWEWH	11/27/2007 13:03	32.6	27.7	3.6	36.1	-12.6	113	0	0	Decreased 1/4

Winnebago Landfill Gas Extraction 12/10/07

	Pote/Time							A -12 - E1 -		0
Device ID	Date/Time		CO2	O2	Balance	SP	ıemp	Adj. Flow	Vacuum	Comments
NAC:- CNAFLA	42/44/2007 40 50	%	%	%	%		776	Scfm	(adj Flow)	
WinGWFLA	12/11/2007 10:59	56.9	36.9	0.7	5.49	1	776	576	15	1.0/0
WinGW100	12/10/2007 15:11	53.9	31.7	0	14.39	-1	45	0	0	Increased 1/4
WinGW101	12/10/2007 15:14	51.8	32.7	0	15.5	-3.7	70	0	0	-1
WinGW102	12/10/2007 15:17	20.0		•	20.4	-0.1	50	0	0	Closed
WinGW103	12/10/2007 15:19	39.3	30.6	0	30.1	-7	95	0	0	
WinGW110	12/10/2007 15:08		37.6	0	0.1	-0.3	51	0	0	Increased 1/4
WinGW111	12/10/2007 15:45		41.7	0	0.09	-0.3	104	0	0	Increased 1/4
WinGW112	12/10/2007 15:38		43.6	0	0.1	-0.1	101	0	0	Increased 1/4
WinGW113	12/10/2007 15:23	59.2	36.9	0	3.89	-2.1	70	0	0	
WinGW120	12/10/2007 15:03	49.4	28.5	1.3	20.8	-1.8	44	0	0	
WinGW121	12/10/2007 15:48	58.4		0	0.09	-1.6	82	0	0	Increased 1/4
WinGW122	12/12/2007 15:00	47.2	32.6	1	19.2	-3.6	83	0	0	
WinGW123	12/10/2007 15:27	61.8	38	0	0.2	-2.2	87	0	0	
WinGW130	12/10/2007 15:00	45.1	29.6	0	25.3	-7.2	56	0	0	
WinGW131	12/10/2007 15:50	59.6	40.3	0	0.1	-4.5	75	0	0	
WinGW132	12/10/2007 15:55	56.9	43	0	0.09	-3	92	0	0	
WinGW133	12/10/2007 16:02	57.1	42.8	0	0.1	-0.3	80	0	0	Increased 1/4
WinGW134	12/10/2007 15:32	63.7	36.2	0	0.09	-1	47	0	0	Increased 1/4
WinGW140	12/10/2007 14:56	48	30.6	3.4	18	-2.4	61	0	0	
WinGW141	12/10/2007 0:00	71.6	28.4	0	0	-1.1	99	0	0	Increased 1/2
WinGW142	12/10/2007 0:00	71.4	28	0.6	0	-13.3	71	0	0	•
WinGW150	12/10/2007 14:54	62.7	36.6	0	0.7	-11.8	64	0	0,	
WinGW151	12/10/2007 0:00	68	31.4	0.6	0	-3.5	97	0	0	
WinGW152	12/10/2007 0:00	66.9	31.6	1.5	0	-14	31	0	0	
WinGW160	12/10/2007 14:49	62.5	36.7	0.2	0.59	-6.6	64	0	0	
WinGW161	12/10/2007 0:00	72.4	27.6	0	0	-0.1	61	0	0	Increased 1/2
WinGW162	12/12/2007 15:11	47.2	34.9	3.8	14.09	-3.1	47	0	0	Decreased 1/2
WinGW170	12/10/2007 14:46	62.2	35.7	0	2.09	-7	83	0	0	
WinGW171	12/12/2007 14:51	57 <i>.</i> 7	42.2	0	0.09	-0.1	103	0	0	Increased 1/4
WinGW180	12/10/2007 14:45	55.5	33.6	0	10.9	-9.7	76	0	0	
WinGW181	12/10/2007 0:00	66.9	32.5	0.6	. 0	-8.3	92	0	0	
WinGW190	12/12/2007 15:19	66.4	31.5	0	2.09	-0.1	91	0	0	Increased 1/4
WinGW191	12/10/2007 14:35	59	40.9	0	0.09	-6.8	80	0	0	
WINGWEEH	12/10/2007 0:00	73.3	24	2.7	0	-17.1	99	0	0	
WINGWEMH	12/10/2007 0:00	74	26	0	0	-18.4	84	0	0	•
WINGWEWH	12/10/2007 0:00	68.5	30.9	0.6	. 0	-4.3	94	0	0	



	Winnebago Gas Extraction South Unit 7/24/07										
Device ID	Date/Time	CH4	CO2	02	Balance	SP	Temp	Init. Flow	Vacuum	Comments	
		%	%	%	%	in H2O	degF	Scfm	(adj Flow)		
									• •		
WINGWSFL	7/24/2007 12:06	48.5	36.4	0.5	14.59	4	600	728	34		
WINGWS01	7/24/2007 11:10	41.1	32.3	1.8	24.8	-1.5	121	0	•		
WINGWS02		Destroyed	during garb	age place	ment. End o	of June					
WINGWS03	7/24/2007 11:06	49.3	37	0.2	13.5	-7.6	124	0			
WINGWS04		Destroyed	during garb	age place	ment. End o	of June					
WINGWS05	7/24/2007 11:18	59.8	39.9	0.1	0.19	-30.3	104	0			
WINGWS06		Destroyed	during garb	age place	ment. End	of June					
WINGWS08	7/24/2007 11:02	40	32.5	1	26.5	-8.4	127	0			
WINGWS10	7/24/2007 11:28	54.9	39.4	0.1	5.59	-30.4	92	0			
WINGWS11	7/24/2007 10:57	54	39.2	0.5	6.29	-8.3	97	0			
WINGWS14	7/24/2007 11:40	52	38.9	0.3	8.79	-13	110	0	-		
WINGWS17	7/24/2007 10:52	57.7	41.7	0.4	0.19	-0.2	119	0			
WINGWS20	7/24/2007 11:42	52.9	38.2	0.3	8.59	-16.2	110	0			
WINGWS24	7/24/2007 11:57	44	33.1	0	22.9	-0.8	129	0			
WINGWS30	7/24/2007 11:53	4 1 9	32.9	0.4	24 79	-8.6	120	0			

Winnebago Gas Extraction South Unit 8/29/07

D 1D	Date/Time CF	OLIA	000	02	Dalanca	e SP	T	بدرها الالماد	Vaarrina	Camananta
Device ID	Date/Time	CH4	CO2	02	Balance		Temp	Init. Flow	Vacuum	Comments
		%	%	%	%	in H2O	degF	Scfm	(adj Flow)	
WINGWSFL	8/29/2007 11:56	51.4	39.4	0.1	9.09	4.5	720	769	49	
WINGWS01	8/29/2007 11:53	53.9	38.1	0.4	7.6	-2.6	115	0	0	Increased 1/4
WINGWS02		Destroyed	during garba	age place	ement. End	of June				
WINGWS03	8/29/2007 11:39	47	36.5	0.1	16.4	-15.7	125	0 .	0	
WINGWS04		Destroyed	during garba	age place	ement. End	of June				
WINGWS05	8/29/2007 11:14	58.5	40.5	0.6	0.39	-41.3	104	0	0	
WINGWS06		Destroyed	during garba	age place	ement. End o	of June				
WINGWS08	8/29/2007 11:42	45.5	35.3	0.9	18.3	-10.3	123	0	0	
WINGWS10	8/29/2007 11:16	56.4	40.8	0.5	2.29	-41.2	93	0	. 0	
WINGWS11	8/29/2007 11:44	52.9	38.8	0.1	8.19	-11.9	95	0	0	
WINGWS14	8/29/2007 11:19	57.1	41.6	0.2	1.1	-21.1	112	0	0	
WINGWS17	8/29/2007 11:47	57.6	42.3	0	0.1	-0.7	112	0	0	Increased 1/4
WINGWS20	8/29/2007 11:21	51.5	38.5	0.5	9.5	-25.1	112	0	0	
WINGWS24	8/29/2007 11:23	50.6	39.5	0	9.9	-6.3	128	0	0	Decreased 1/4
WINGWS30	8/29/2007 11:25	51.7	37.6	0.1	10.6	-11.3	122	0	0	

Winnebago Gas Extraction South Unit 9/27/07

Date/Time CH4 CO2 O2 Balance

% % % % in Device ID SP Init. Flow Vacuum Comments Temp in H2O degF Scfm (adj Flow)

WINGWSFL	9/27/2007 15:16	49.4	37.7	0.4	12.49	3.7	661	703	52	
WINGWS01	9/27/2007 14:44	51.5	38.7	0.3	9.49	-1	108	0	0	Increased 1/4
WINGWS02		Destroyed	during garba	age place	ment. End	of June				
WINGWS03	9/27/2007 14:40	47.3	36.8	0.1	15.8	-15.8	125	0	0 .	Decreased 1/4
WINGWS04		Destroyed	during garba	age place	ment. End	of June				
WINGWS05	9/27/2007 14:49	57.6	40.9	Ó	1.5	-44.2	102	0	0	
WINGWS06		Destroyed	during garba	age place	ment. End	of June				
WINGWS08	9/27/2007 14:36	39.6	32.1	1.6	26.7	-10	126	0.	0	Decreased 1/4
WINGWS10	9/27/2007 14:51	54.4	39.9	0	5.69	-43.5	91	0	0	
WINGWS11	9/27/2007 14:31	51	37.8	0	11.2	-13.1	98	0	0	
WINGWS14	9/27/2007 14:53	51.5	39.7	0	8.79	-23.2	113	0	0	
WINGWS17	9/27/2007 14:29	50.8	38.6	0.9	9.7	-3	113	0	0	Decreased 1/4
WINGWS20	9/27/2007 14:56	51.1	37.9	0.1	10.9	-27.7	113	0	0	
WINGWS24	9/27/2007 14:59	50.1	38.9	0	11	-5.4	․ 128	0	0	
WINGWS30	9/27/2007 15:08	44.5	35.2	0.7	19.59	-11.8	128	0	0	Decreased 1/4

	Winnebago Gas Extraction South Unit 10/10/07						•			
Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	SP in H2O	Temp degF	Init. Flow Scfm	Vacuum (adj Flow)	Comments
WINGWSFL	10/10/2007 16:	23 50.7	38.4	0.1	10.79	2.8	649	647	47	
WINGWS01	10/10/2007 15:	47 52.4	37.2	0.7	9.69	-2	103	0	0	Increased 1/4
WINGWS02		Destroy	ed during ga	rbage pla	cement. End	of June				
WINGWS03	10/10/2007 15:	44 50.9	38.6	0	10.5	-12.2	121	0	0	Decreased 1/4
WINGWS04		Destroy	ed during ga	rbage pla	cement. End	of June				
WINGWS05	10/10/2007 15:	54 58.1	41.8	0	0.1	-40.9	98	0	0	
WINGWS06		Destroy	ed during ga	rbage pla	cement. End	of June				
WINGWS08	10/10/2007 15:	41 42.2	34.4	1	22.39	-9.3	124	0	. 0	Decreased 1/4
WINGWS10	10/10/2007 15:	57 58.3	41.4	0	0.29	-41.1	85	0	0	
WINGWS11	10/10/2007 15:	35 53.1	40.2	0	6.7	-12.5	96	0	0	
WINGWS14	10/10/2007 16:	00 53.6	40.6	0	5.8	-22.5	113	0	0	
WINGWS17	10/10/2007 15:	32 56.4	42	0	1.59	-2.3	107	0	0	
WINGWS20	10/10/2007 16:	02 54	39.8	0	6.2	-26.1	112	0	0	
WINGWS24	10/26/2007 0:0	0 53.8	38.8	0	7.4	-9.4	112	0	0	
WINGWS30	10/10/2007 16:	09 48.7	37.7	. 0	13.59	-8.6	127	0	0	Decreased 1/4

	Winnebago Gas Extraction South Unit 11/14/07									
Device ID	Date/Time	CH4	CO2	02	Balance	SP .	Temp	Init. Flow	Vacuum	Comments
		%	%	%	%	in H2O	degF	Scfm	(adj Flow)	
WINGWSFL	11/14/2007 17:33	56.6	42.6	0.6	0.2	6.2	558	928	25	
WINGWS01	11/8/2007 16:05	56.6	43.3	0	0.1	-7.4	74	0	0	
WINGWS02	11/14/2007 16:30	56.5	39.8	0	0	-14.4	0	0	0	
WINGWS03	11/14/2007 16:27	58.9	39.7	0.1	1.29	-11.9	98	0	0	
WINGWS04	11/14/2007 16:36	43.1	36.5	1.5	18.9	-8.3	86	0	0	Decreased 1/4
WINGWS05	11/8/2007 17:04	58.6	41.2	0	0.2	-14.5	83	0	0	
WINGWS06	11/14/2007 16:34	58.2	41.7	0	0.09	-4.4	54	0	0	Increased 1/4
WINGWS08	11/14/2007 16:20	44.7	35.2	0.4	19.69	-11.1	103	. 0	0	Increased 1/4
WINGWS10	11/8/2007 17:08	58.3	41.6	0	0.1	-14.6	72	0	0	
WINGWS11	11/14/2007 16:17	58.5	41.4	0	0.09	-11.3	77	0	0	Increased 1/4
WINGWS14	11/8/2007 17:12	57.4	42.5	. 0	0.09	-10.4	97	0	0	•
WINGWS17	11/14/2007 16:13	46.2	35.9	1.4	16.49	-4.8	90	0	0	Increased 1/4
WINGWS20	11/14/2007 17:19	58.7	41.2	0	0.09	-11.6	90	0	0	
WINGWS24	11/14/2007 17:16	49.8	38.4	0.3	11.49	-10.2	107	0	0	
WINGWS30	11/14/2007 17:13	58.1	41.3	0.4	0.2	-2.1	78	0	0	Increased 1/4
WINGWSMH	11/14/2007 16:58	52.6	47.2	0	0.2	-4.1	0	0	0	Increased 1/4
WINGWSNH	11/14/2007 17:05	49.1	50.8	Ö	0.1	-2.7	0	ő	Ŏ	Increased 1/4
		49.9	50	ő	0.09	-3.5	0	ő	Ö	11101000000 171
				-			-	-	-	

Winnebago Gas Extraction South Unit 12/7/07

	vvinnebago Gas Extraction South Unit 12/7/07									
Device ID	Date/Time	CH4	CO2	02	Balance	SP	Temp	Init. Flow	Vacuum	Comments
		%	%	%	%	in H2O	degF	Scfm	(adj Flow)	
WINGWSFL	12/11/2007 11:05	57.3	42.4	0.2	0.09	5.3	534	886	15	
WINGWS01	12/7/2007 15:17	53.6	39.8	0	6.6	-2.4	71			Increased 1/4
WINGS02A	12/7/2007 15:32	57.2	42.7	0	0.09	-3	62			Increased 1/4
WINGWS03	12/7/2007 15:24	59	40.9	. 0	0.09	-3.5	88			Increased 1/4
WINGS04A	12/7/2007 15:39	33.5	30.6	1.6	34.3	-0.9	100			Increased 1/4
WINGWS05	12/7/2007 15:42	57.4	42.5	. 0	0.09	-4.7	62			Increased 1/4
WINGS06A	12/7/2007 15:36	57	42.9	0	0.09	-0.9	71			Increased 1/4
WINGWS7A	12/7/2007 16:40	57	42.3	0	0.7	-1.1	63			Increased 1/4
WINGWS08	12/7/2007 15:13	57.1	42.8	0	0.1	-3.8	84			Increased 1/4
WINGWS09	12/7/2007 14:42	57	42.9	0	0.09	-0.9	64			Increased 1/2
WINGWS10	12/7/2007 15:46	58.1	41.8	0	0.1	-4.8	52			Increased 1/4
WINGWS11	12/7/2007 15:09	57	42.8	0.1	0.1	-1.5	65			Increased 1/4
WINGS12A	12/12/2007 15:49	56.9	43	0	0.09	-0.1	66			Increased 1/4
WINGS13A	12/7/2007 14:32	57.5	42.3	0	0.2	-0.6	36			Increased 1/2
WINGWS14	12/7/2007 15:54	57.4	42.5	0	0.09	-0.5	92			Increased 1/4
WINGS15A	12/12/2007 15:41	53	46.9	0	0.09	-0.2	83			Increased 1/4
WINGS16A	12/12/2007 15:53	57.8	42.1	0	0.1	-0.1	81			Increased 1/4
WINGWS17	12/12/2007 16:03	58.2	41.6	0	0.2	-0.4	52			
WINGS18A	12/7/2007 14:28	57.4	42.5	0	0.09	-0.3	32			Increased 1/2
WINGWS20	12/7/2007 15:58	57.5	42.4	0	0.09	-1.5	82			increased 1/4
WINGS21A	12/7/2007 14:48	52.5	38.7	0	8.79	-2.1	63			
WINGS22A	12/7/2007 14:22	54.3	45.5	0.1	0.1	-1.1	83			Increased 1/4
WINGWS24	12/7/2007 16:01	56.4	43.1	0.4	0.09	-2.8	98			Increased 1/4
WINGS25A	12/7/2007 16:13	57.9	41.9	0	0.19	-0.2	95			Increased 1/4
WINGS26A	12/7/2007 14:50	61.3	38.6	0	0.1	-2.7	56			Increased 1/2
WINGS27A	12/7/2007 14:18	54.1	45.8	0	0.1	-0.8	70			Increased 1/2
WINGS28A	12/7/2007 14:13	53.1	46.8	0	0.1	-1.7	62			Increased 1/2
WINGWS30	12/7/2007 16:04	57.1	42.8	0	0.1	-1.2	83			Increased 1/4
WINGWS32	12/7/2007 16:09	56.2	43.7	0	0.09	-0.6	65			Increased 1/4
	12/12/2007 15:37	52.5	47.3	0	0.2	-0.6	0			Increased 1/4
	12/12/2007 15:35	50.5	49.4	0	0.09	-0.5	0			
WINGWSSH	12/12/2007 15:47	45.5	32.2	4.5	17.79	-4	0			Decreased 1/4

APPENDIX C CONTROL DEVICE DOWNTIME RECORDS

Winnebago Landfill Rockford, Illinois Control Device Downtime Events

Date(s) of Event	Duration of Event (hours)	Equipment Affected	Reason for Downtime
7/17/07	7.0	North Flare and Blower	Unknown cause of equipment shutdown
11/9/07	2.0	North Flare and Blower	Shutdown for elephant snout connection preparation
11/12/07	1.5	North Flare and Blower	Shutdown for GCCS to Energy Plant construction work
11/16/07	1.5	North Flare and Blower	Shutdown for pumping dome tank
11/26/07	1.5	North Flare and Blower	Shutdown for pumping dome tank
11/29/07	2.5	North Flare and Blower	Unknown cause of equipment shutdown
12/1/07 – 12/3/07	38.0	North Flare and Blower	Loss of power – utility down
12/11/07	4.0	North Flare and Blower	Shutdown for WEC engine operation
12/18/07	5.25	North Flare and Blower	Shutdown for WEC engine operation
12/21/07	7.0	North Flare and Blower	Shutdown for WEC engine operation
12/26/07	5.25	North Flare and Blower	Shutdown for WEC engine operation
12/28/07	3.5	North Flare and Blower	Shutdown for WEC engine operation
7/17/07	7.25	South Flare and Blower	Loss of power – utility down
10/23/07	1.25	South Flare and Blower	Shutdown for GCCS construction
11/7/07	1.75	South Flare and Blower	Shutdown for GCCS construction
12/1/07 - 12/3/07	32.0	South Flare and Blower	Loss of power – utility down
12/21/07	8.0	South Flare and Blower	Shutdown for GCCS construction

APPENDIX D QUARTERLY SURFACE EMISSIONS MONITORING RESULTS



October 22, 2007

Mr. Evan Buskohl 5450 Wansford Way Suite 201B Rockford, IL 61109

Subject:

WRS-Pagel Landfill

3rd Quarter 2007 NSPS Surface Monitoring Results

Dear Evan,

The required NSPS surface methane monitoring event for the third quarter of 2007 was conducted at Pagel Landfill on September 25, 2007. The monitoring event indicated that no surface methane concentrations exceeded the 500 ppm concentration threshold specified in the NSPS regulations.

Attached are the field data sheets for this monitoring event. Although you are not required to submit these records to the IEPA or the U.S. EPA (unless specifically required under your CAAPP permit or other permit), the NSPS regulations require that you keep the monitoring records on file for 5 years. In accordance with condition 1.1.10.c.v. of the Joint Construction and Operating Permit – NSPS Source, information on this exceedance should be included in your annual NSPS report. If you have any questions, please feel free to call me at (317) 595-6492 or contact me via email at bparaskevas@andrews-eng.com.

Sincerely,

Bill Paraskevas, P.E.

Andrews Environmental Engineering, Inc.

attachments

NSPS Surface Methane Monitoring Monitoring Event Data Form

Instructions: Complete a new form for each monitoring event, including re-monitoring events.
Date: 9/27/07 Site: Page LP Project No.: 90-114
Quarter (circle): 1 st 2 nd 3 rd 4 th 2007 Technician: 5 RAdinlavic
Date: 9/27/07 Site: Page LP Project No.: 90-11-1 Quarter (circle): 1 st 2 nd 3 rd 4 th 2007 Technician: 5. Radiolovic Monitoring Event (circle): initial 1 st 10-day re-monitor 2 nd 10-day re-monitor
1-month re-monitor 1-month+10 day re-monitor
Instrument: Foxboro TVA-1000
Instrument Calibration: Calibrate instrument immediately prior to performing a monitoring event. A calibration performed in the office before proceeding into the field is acceptable. Calibration must involve actually setting the instrument to 500 ppm against the methane calibration gas, not just merely checking the instrument reading (field checking) against the calibration gas. See the Instrument Preparation Instructions located in the TVA case for instructions on performing the calibration.
Calibration gas: Methane @ 500 ppm
Date: 9/27/07 Time of calibration: 4,06 am pm
Calibration location (circle): office field
If calibrated in field, specify field location: 2,000,200N 400,650 E Instrument set to read 500 ppm methane? Y N If no, explain:
Instrument set to read 500 ppm methane? N If no, explain:
Calibration Precision Test: Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.
Include a copy of the most recent Calibration Precision Test results (from the blue folder

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

in the TVA case) with the field data forms for this quarter.



Monitoring Event Data:

If site has a meteorological station, obtain weather information from the site station, otherwise, estimate or obtain info from the internet using the nearest representative station.

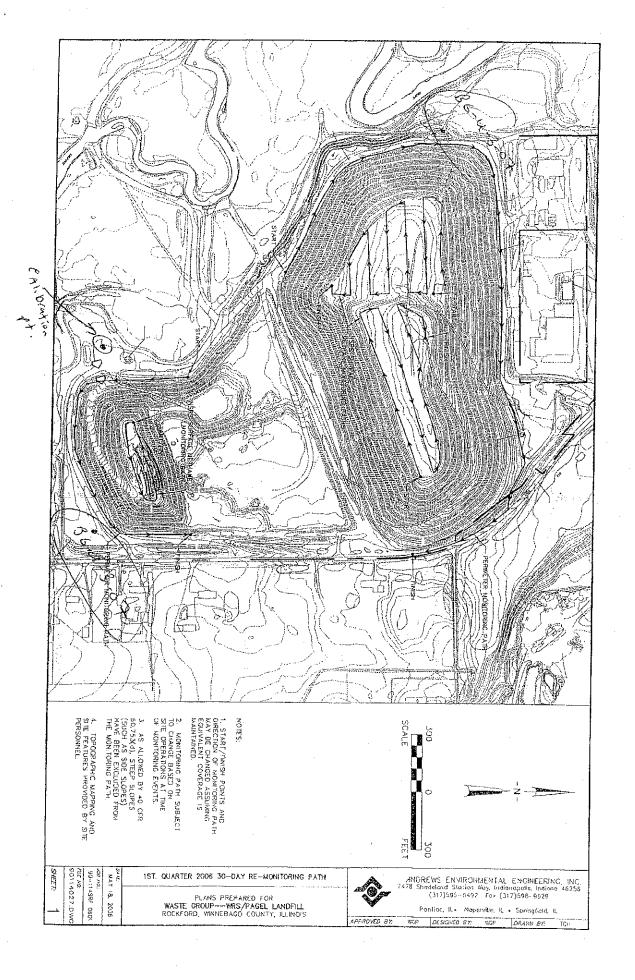
Temperature: 72 °F. Wind direction/speed: WWW1 | 4 mph Weather: fartly cloudy

Barometric Pressure—Beginning: 29.93 in. Hg @ 3354 am pm

Ending: 29.99 in. Hg @ 6.59 am pm

	/i -		ackground				
Identification	Time	Location	Approx. Northing	Approx. Easting	N	inside the land flethane nc. (ppmv)	Notes
BG-U <u>-3</u> -&7	4:30	Upwind	2,002,000	799,500		. 2.	
BG-D <u>-3-</u> ▷}	4:45	Downwind	2,000,200	801,700	9	1.8	
			Monitor	ing Data			
Exceedance #	Time	· · · · · · · · · · · · · · · · · · ·	ation	_∫ >500 pp		Methane	Notes/Comments
(show on map)	·	Approx. N	Арргох. Е	detecte	d? (Conc. read	
Nο	CTCZE	dances					

	-						
					_		
				ļ			
į							
			7				
				 			
]			



History for Rockford, IL

Thursday, September 27, 2007 --- View Current Conditions

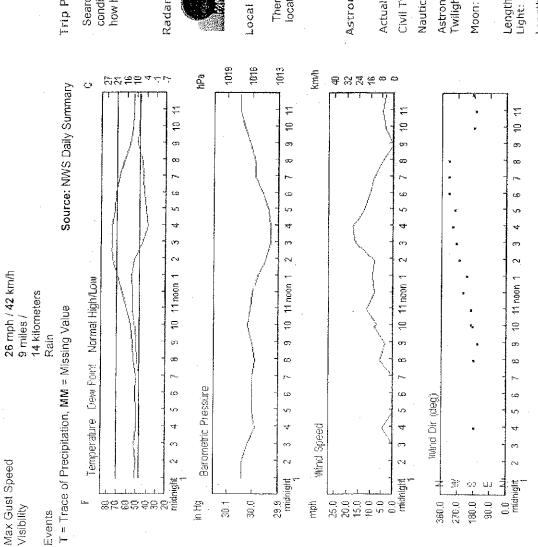
ay »		
Next		
	8	
Ī	>	
	2007	
	•]	
	27	
	+	
	September	100000000000000000000000000000000000000
x Previous Day,		•

in a war district and the second of the second			
Daily	Weekly	Monthly C	Custom
-	Actual:	Average:	Record:
Temperature:			
Mean Temperature	63 °F / 17 °C	59 °F / 15 °C	
Max Temperature	76 °F / 24 °C	70 °F / 21 °C	89 °F / 31 °C (1954)
Min Temperature	49 °F / 9 °C	47 °F / 8 °C	29 °F / -1 °C (1942)
Degree Days:			
Heating Degree Days	2		
Month to date heating degree days		112	
Since 1 July heating degree days	69	131	
Cooling Degree Days	0		
Month to date cooling degree days	132	7.1	
Year to date cooling degree days	666	758	
Growing Degree Days	12 (Base 50)		
Moisture:			
Dew Point	47 °F / 8 °C		
Average Humidity	57		
Maximum Humidity	. 86		
Minimum Humidity	27.		
Precipitation:			
Precipitation	0.06 in / 0.15 cr	n 0.10 in / 0.25 cm	0.06 in / 0.15 cm 0.10 in / 0.25 cm 2.00 in / 5.08 cm (1999)
Monifi to date precipitation	1.66	3.17	
Year to date precipitation	31.61	29.07	
Sea Level Pressure;			
Sea Level Pressure	30.01 in /		
	1016 hPa		
Wind:			
Wind Speed	6 mph / 9 km/h		
4 () () () () () () () () () ((SW)		
ומושל איזות סיטפפת	22 mpn / 33 km/n		

Recent: KRFD, KIKK

Airport: KRFD

Change Location:



Submit

Trip Planner:

Search our historical database for the weather conditions in past years. The results will help you decide how hot, cold, wet, or windy it will be!

Go To The Trip Planner

Radar Archive:



Local Photos:

There were no photos found matching this date and location,

View More WunderPhotos

Astronomy for September 27, 2007;

6:45 PM CDT 7:13 PM CDT 6:48 AM CDT 6:20 AM CDT Civil Twilight: Actual Time:

7:45 PM CDT 8:18 PM CDT 5:48 AM CDT 5:15 AM CDT Nautical Twilight: Astronomical Twilight:

7:48 AM CDT (9/27)7:01 PM CDT (9/27)Moon:

12h 52m Length Of Visible Light:

11h 56m Length of Day;

Events:Conditions: Partly Cloudy Partly Cloudy Scattered Clouds Partly Cloudy Partly Cloudy Clear Clear Clear Clear Clear Clear	·		
Precip: 0.0 cm N/A			The state of the s
Wind Speed: Gust Speed: 0.0 of 8.1 mph / 13.0 km/h - 13.0 km/h - 13.0 km/h - 13.0 km/h - 14.1 m/s - 19.2 mph / 14.1 m/s - 19.2 mph / 14.1 mph / 13.0 km/h 18.4 mph / 10.8 m/s - 10.4 mph / 10.8 m/s - 10.4 mph / 10.8 m/s - 10.4 mph / 10.7 m/s - 10.4 mph / 13.0 km/h / 5.7 m/s - 10.4 mph / 13.0 km/h / 14.5 m/s 14.5 m/s 15.5 km/h / 14.5 m/s			
·			
Wind Dir. Wsw Sw Sw West West Wow Wnw Wnw Nw Nw Nw Nw Nw South South South		·	***************************************
Visibility: 14.5 kilometers 10.0 miles / 16.1 kilometers 16.1 kilometers 16.1 kilometers 16.1 kilometers			
Dew Point: Humidity: Sea Level 142.2 °C 1016.0 hPa 54.0 °F / 68% 30.00 in / 10.2 °C 1015.9 hPa 55.0 °F / 61% 10.15.9 hPa 52.0 °F / 61% 10.15.1 hPa 52.0 °F / 29.93 in / 10.1 °F / 29.93 in / 10.1 °F / 29.93 in / 29.93 in / 29.00 °F / 29.93 in / 29.00 °F / 29.93 in / 29.00 °F / 29.99 in /			
nt: Humid 68% 61% 46% 33% 33% 52% 74% 80% 80% 77%			
Dew Poin 12.2 ° C 12.2 ° C 12.2 ° C 12.3 ° C 12.4 ° F 12.4 ° F 11.1 ° E 12.9 ° C 39.0 ° F 8.1 ° C 48.9 ° F 8.3 ° C 46.0 ° F 8.3 ° C 7.8 ° C 7.8 ° C			
Time (CDT): Temp: AM 15.6 °C 11.54 64.9 °F AM 18.3 °C 12.54 69.1 °F PM 23.3 °C 2.54 PM 23.3 °C 2.54 PM 23.9 °C 3.54 PM 23.9 °C 4.54 PM 23.9 °C 5.54 PM 23.9 °C 7.54 PM 23.9 °C 7.54 PM 12.2 °C 7.54 PM 19.4 °C 7.54 PM 19.4 °C 7.54 PM 19.4 °C 7.54 PM 19.4 °C 7.554 PM 19.5 °C 10.554 FM 11.7 °C 10.554 FM 11.7 °C 10.554 FM 11.7 °C 10.555 FM 11.7 °C 10.555 FM 11.7 °C 10.556 FM 11.7 °C 10.557 FM 11.7 °C			

APPENDIX E CORRESPONDENCES

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1023 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGRIED, REINOIS 62794-9276 -- (217) 782-3397 JAMES R. THOMPSON CENTER, 100 WIST RANDOLPH, SUIT 11-300, CHICAGO, IL 60601 (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

SEP 2 1 2007

Evan Buskohl
Environmental Manager
Winnebago Landfill Company, LLC
5450 Wansford Way, Suite 201
Rockford, Illinois 61109

RE: Winnebago Landfill

I.D. 201801AAF

Request to Decommission Weil 102

Dear Mr. Buskohl:

The Illinois Environmental Protection Agency (Illinois EPA) has received your letter, dated September 13, 2007, requesting to decommission well 102.

The Illinois EPA is granting your request to decommission the above-listed well. The Illinois EPA requests that a minor CAAPP permit modification be submitted to the Bureau of Air Permits Section within 30 days after receipt of this letter. This modification shall include an amended gas collection and control system design plan reflecting that gas extraction well 102 has been permanently decommissioned.

Questions regarding this matter shall be directed to Yasmine Keppner of my staff at 217/782-5811, or the undersigned.

Sincerely,

Raymond E. Pilapil, Manager

Compliance Section

Bureau of Air

REP: yk

ı			
	÷		
·			
	·	. *	



February 9, 2008

Mr. Evan Buskohl 5450 Wansford Way Suite 201B Rockford, IL 61109

Subject:

WRS-Pagel Landfill

4th Quarter 2007 NSPS Surface Monitoring Results

Dear Evan,

The required NSPS surface methane monitoring event for the fourth quarter of 2007 was conducted at Pagel Landfill on December 31, 2007. The monitoring event indicated that no surface methane concentrations exceeded the 500 ppm concentration threshold specified in the NSPS regulations.

Attached are the field data sheets for this monitoring event. Although you are not required to submit these records to the IEPA or the U.S. EPA (unless specifically required under your CAAPP permit or other permit), the NSPS regulations require that you keep the monitoring records on file for 5 years. In accordance with condition 1.1.10.c.v. of the Joint Construction and Operating Permit – NSPS Source, information on this exceedance should be included in your annual NSPS report. If you have any questions, please feel free to call me at (317) 595-6492 or contact me via email at bparaskevas@andrews-eng.com.

Sincerely.

Bill Paraskevas, P.E.

Andrews Environmental Engineering, Inc.

attachments

NSPS Surface Methane Monitoring Monitoring Event Data Form

Instructions: Complete a	new form for each m	nonitoring e	vent, including re-monitoring events.
Date: 12/31/07	Site: Page 1	LF	Project No.: 90-114
Quarter (circle): 1 st 2 nd	3 rd (4 th) 200 7	Techni	ician: S. Padulovic
Monitoring Event (circle):	initial 1st 10-day	re-monitor	2 nd 10-day re-monitor
	1-month re-monitor		1-month+10 day re-monitor
Instrument: Foxboro TVA-	1000		
instrument to 500 ppm agair	o the field is accepta est the methane calibi st the calibration gas.	ible. Calibr ration gas, <u>r</u> See the Ins	ng event. A calibration performed in the ation must involve actually setting the not just merely checking the instrument strument Preparation Instructions located
	Calibration gas: M	ethane @ 5	000 ppm
Date: 12/31/07	Time of calibration		
Calibration location (circle):			
f calibrated in field, specify	field location: 2.00	30,250N	900,700E
			plain:
Calibration Drawing T			

Calibration Precision Test:

Review the requirements for performing a Calibration Precision Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Calibration Precision Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

Response Time Test:

Review the requirements for performing a Response Time Test described on the Instrument Preparation Instructions located in the blue folder inside the TVA case, and determine if a new test is required.

Include a copy of the most recent Response Time Test results (from the blue folder in the TVA case) with the field data forms for this quarter.

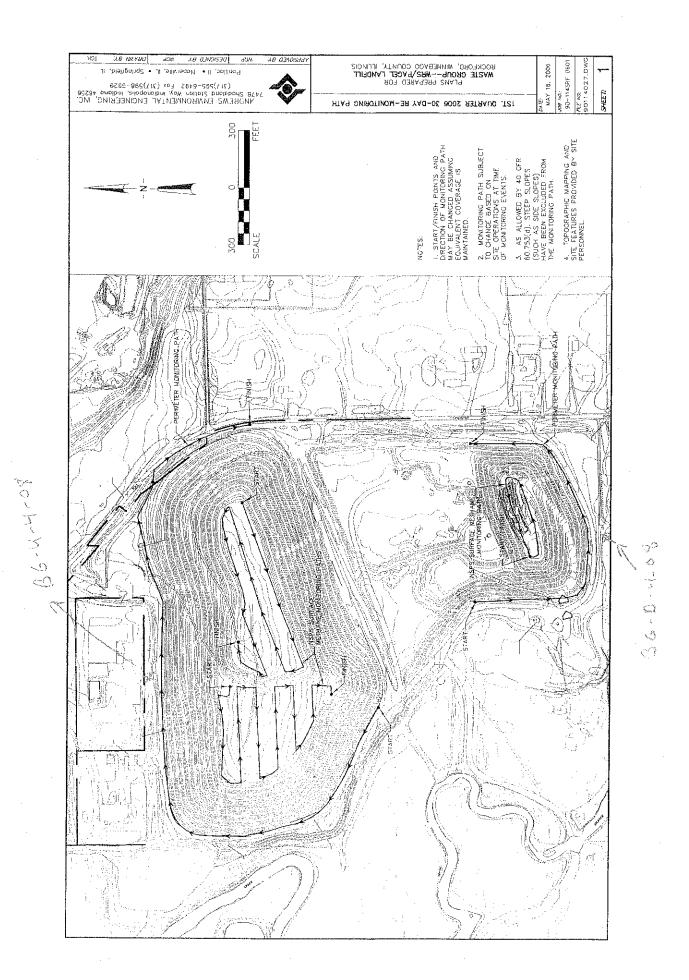


Monitoring Event Data:

If site has a	meteorological	station, ob	tain weathe	r information	from the	site s	station,	otherwise,	estimate
or obtain info	o from the intern	et using the	nearest rep	oresentative s	station.				

Temperature: 28 °F	Wind directi	on/speed:	M/5-19) nph	Weather:	OV+RCASt,	
Barometric Pressure—	Beginning:	29.81	in. Hg @ _	2110	am pm		SNOW
E	Ending: $\frac{\tilde{7}}{2}$	<u> 935 </u>	in. Hg @ _	5124	am pm		

,			ackground (JCD 5- A
Identification (show on map)	Time	Location	Approx. Northing	Approx. Easting	Methane Conc. (ppmv)	Notes
BG-U <u>-4</u> -66	3100	Upwind	2,012,400	\$00,000		
BG-D <u>~Ч</u> -08	3:30	Downwind	2,000,000	401,200		
			Monitor	ing Data		
Exceedance # (show on map)	Time	Loca Approx. N	Approx. E	>500 pp	\$	Notes/Comments
No	C7	ceedun				
			1011			



History for Rockford, IL

Monday. December 31, 2007 — View Current Conditions

[Beatly Strimmery]

Change Location:	Airport: KRFD	Recent: KRFD	Submit	To contribution to the state of		Tour of the	Search our historical database for the weather	conditions in past years. The results will help you	decide how hot, cold, wet, or windy it will be!		Go To The Trip Planner		Rader Archiver	William Animated Dodor 1	This image may take a moment to	Copposite Coppos			Local Photos:	Ē	There were no photos found matching this date and location.		View More Winder Dhotos		Astronomy for Section 185 - 185 - 185 - 186 - 18	Rise: Set:	AM CST
		Custom	Record:			56 °F / 13 °C (1965) -17 °F / -27 °C (1963)													0.72 in / 1.83 cm (1923)				8.50 In / 21.59 cm (19/8)				
Next Day »	View	Monthly	Average:	1	20°F/-6°C	28 ⁻F / -2 °C 12 °F / -11 °C		45	1244	2675	0	0	768						0.05 in / 0.13 cm					13.5			
	31 🕶 2007	Weekly	Actual:	() () () () () () () () () ()	27 °F / -2 °C	30 F / -1 C 23 °F / -5 °C		38	1230	2351	0	0	1059		22 °F / -5 °C	83	96	81	0.11 in / 0.28 cm	3.27	37.10	10 17 -1 07 0	3.10 III / 7.07 GII	7.1.7	6.00 in / 15.24 cm		29.85 in / 1011 hPa
« Previous Day	December	.: Daily ₩		Temperature:	Mean Temperature	Min Temperature	Degree Days:	Heating Degree Days	Month to date heating degree days	Since 1 July heating degree days	Cooling Degree Days	Month to date cooling degree days	 Year to date cooling degree days 	Moisture:	Dew Point	Average Humidity	Maximum Humidity	Minimum Humidily		e precipitation	date precipitation	allow.	100000000000000000000000000000000000000			ressure:	Sea Level Pressure

Wind: Wind Speed

Max Wind Speed Max Gust Speed Visibility

Events

T = Trace of Precipitation, MM = Missing Value

6 mph / 9 km/h (North) 22 mph / 35 km/h 28 mph / 45 km/h 2 miles / 3 kilometers Fog , Snow

Source: NWS Daily Summary

5:05 PM CST 6:53 AM CST Civil Twilight:

5:40 PM CST Nautical Twilight: 6:17 AM CST 6:14 PM CST 5:43 AM CST

Astronomical Twilight:

12:08 AM CST 11:30 AM CST (12/31)

Moon:

Length Of Visible 10h 12m Light:

9h 08m Length of Day:



For more information about the solar system,

Definitions of Astronomy Terms.



1019 1016 1013 1003 kmsh g. - 4 1-10 전 12 10 11 10 11 9 Ç ග 00 10 11 noom 1 18 11 noon 1 10 11 noon 1 10 11 noon 1 Temperature Dew Poist Normal High/Low œ, တ Wind Gust 02 00 00 Englished Pressure (20) (Sept. Dir (deg)) (JT) ব Wind Speed 29.8 Land 180.0 F.S. 0.0 Little midnight 270.0 | 196 380.0 23.9 in Hg = 30.0

s: Conditions:		Overcast	Overcast	Overcast	Overcast	Overcast	Overcast	Light Snow	Light Snow	Light Snow	Light Snow	Light Snow	Light Snow	Light Snow						
Events:	í							Snow	Snow	Snow	Snow	Snow	Snow	Snow	Snow	Snow	Snow	Snow	Snow	
Precip:		N/A	Z/A	N/A	N/A	N/A	N/A	0.00 in /	0.01 in /	0.02 in /	0.01 in /	0.02 in /	0.02 in/ 0.1 cm	0.01 in /	0.01 in /	0.00 in /				
Gust Speed:			1		1	1	ı	t .	1	,	ı	1		~_1	,		- 1		,	,
Wind Speed:		3.5 mpn / 5.6 km/n / 1.5 m/s	Calm	3.5 mph / 5.6 km/h / 1.5 m/s	4.6 mph / 7.4 km/h / 2.1 m/s	3.5 mph / 5.6 km/h / 1.5 m/s	4.6 mph / 7.4 km/h / 2.1 m/s	3.5 mph / 5.6 km/h / 1.5 m/s	4.6 mph / 7.4 km/h / 2.1 m/s	4.6 mph / 7.4 km/h / 2.1 m/s	5.8 mph / 9.3 km/h / 2.6 m/s	5.8 mph / 9.3 km/h / 2.6 m/s	6.9 mph / 11.1 km/h / 3.1 m/s	10.4 mph / 16.7 km/h 4.6 m/s	8.1 mph / 13.0 km/h / 3.6 m/s	11.5 mph / 18.5 km/h 5.1 m/s	10.4 mph / 16.7 km/h 4.6 m/s	9.2 mph / 14.8 km/h / 4.1 m/s	9.2 mph / 14.8 km/h / 4.1 m/s	12.7 mph / 20.4 km/h /
Wind Dir.		South	Calm	SE	East	East	East	East	ENE	N	Ш Z	NN	North	North	North	North	North	North	North	
Visibility:	2.8 kilometers	2.8 kilometers	2.0 miles / 3.2 kilometers	1.8 miles / 2.8 kilometers	1.8 miles / 2.8 kilometers	2.0 miles / 3.2 kilometers	2.5 miles / 4.0 kilometers	3.0 miles / 4.8 kilometers	2.5 miles / 4.0 kilometers	2.0 miles / 3.2 kilometers	1.2 miles / 2.0 kilometers	0.8 miles / 1.2 kilometers	0.8 miles / 1.2 kilometers	0.8 miles / 1.2 kilometers	1.0 miles / 1.6 kilometers	0.8 miles / 1.2 kilometers	1.0 miles / 1.6 kilometers	1.5 miles / 2.4 kilometers	1.2 miles / 2.0 kilometers	15 miles /
	1012.8 hPa 20 04 in /	1013.9 hPa	29.90 in / 1012.4 hPa	29.92 in / 1013.2 hPa	29.89 in / 1012.1 hPa	29.86 in / 1011.1 hPa	29.86 in / 1011.2 hPa	29.85 in / 1010.8 hPa	29.81 in / 1009.4 hPa	29.84 in / 1010.3 hPa	29.81 in / 1009.4 hPa	29.81 in / 1009.4 hPa	29.85 in / 1010.6 hPa	29.87 in / 1011.3 hPa	29.85 in / 1010.7 hPa	29.85 in / 1010.7 hPa	29.88 in / 1011.7 hPa	29.86 in / . 1011.1 hPa	29.89 in / 1012.1 hPa	29 87 in 7
Humidity:		85%	86%	88%	88%	%98	85%	85%	%98	.%68	93%	93%	88%	85%	%98	%98	88%	%98	85%	
Dew Point:	4.0 °C 24.1 °E / -	4.4°C	24.8 °F / - 4.0 °C	25.0 °F / - 3.9 °C	25.0 °F / - 3.9 °C	24.8 °F / - 4.0 °C	25.0 °F / 3.9 °C	25.0 °F / - 3.9 °C	24.8 °F / 4.0 °C	26.1 °F / - 3.3 °C	26.6 °F / - 3.0 °C	26.6 °F / - 3.0 °C	27.0 °F / 2.8 °C	25.0 °F / - 3.9 °C	24.8 °F / - 4.0 °C	24.8 °F / - 4.0 °C	25.0 °F / - 3.9 °C	24.8 °F / - 4.0 °C	24,1 °F / - 4,4 °C	24.8 °F / -
Тетр.:	2.0 °C 28 0 °F / -	2.2 °C	28.4 °F / . 2.0 °C	0:54 AM 28.0 °F / .	128.0 °F / - 12.2 °C	28.4 °F / - 2.0 °C	28.9 °F / -	28.9 °F / - 1.7 °C	28.4 °F / - 2.0 °C	28.9 °F / - 1.7 °C	28.4 °F / -	28.4 °F / 2.0 °C	30.0 °F / - 1.1 °C	28.9 °F / 1.7 °C	28.4 °F / - 2.0 °C	28.4 °F / - 2.0 °C	28.0 °F / - 2.2 °C	28.4 °F / - 2.0 °C	28.0 °F / - 2.2 °C	28.4 °F / -
Time (CST):		9:54 AM	10:38 AM	10:54 AM	11:54 AM	11:58 AM	12:54 PM	1:54 PM	2:10 PM	2:54 PM	3:01 PM	3:16 PM	3:54 PM	4:54 PM	5:24 PM	5:35 PM	5:54 PM	6:38 PM	6:54 PM	

Response Time Test Log

For instructions on how to complete this form or calculate values, see the instrument Preparation Instructions forms.

Instrument: Foxboro TVA-1000

Serial Number: 121029088

				1			T			T								
Tech. Initials																		
Average Response Time	≤ 30 seconds? (Y/N)		<u>()</u>								-							
Average Res	= (a+b+c)/3 (seconds)		The state of the s															
Time to reach 90% value	(seconds)	<i>w</i> €		æ	Р	٥	Ø	þ	O	a	p	c	Ø	q	c	ro	Ω	0
90% of	Conc. (ppm)	450) }	,	450			450			450			450			450	
Calib. Gas		500			500			200			500			200			500	
Calib.	Gas	methane			methane			methane			methane			methane			methane	
Time												-						
<u></u>	3		:														•	